



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/573,519	12/15/1995	HIDEO TAKIGUCHI	862.1336	5613
5514	7590	01/05/2007	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			JANKUS, ALMIS R	
			ART UNIT	PAPER NUMBER
			2628	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/05/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	08/573,519	TAKIGUCHI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Almis R. Jankus	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 19 October 2006.  
 2a) This action is FINAL.                  2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,5-20,22-34,110-114,125,126 and 128-134 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,5-17,20,22-31,34,110-114,125,126 and 128-134 is/are rejected.  
 7) Claim(s) 18,19,32 and 33 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>10/13/06</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

1. Applicant's amendment of 10/19/06 has been fully considered in preparing this office action.

2. Claims 1, 5-17, 20, 22-31, 34, 110-114, 125, 126 and 128-134 are rejected under 35 U.S.C. 102(b) as being anticipated by Mackinlay et al. With respect to claim 1, Mackinlay et al. teach the claimed displaying data items included within a similar level of linkage position simultaneously in a substantially same size, at figure 3, for example the week calendar (15-21) being a similar level displaying days (data items) simultaneously in a substantially same size; and displaying first data items, and second data items linked to the first data items, which are not included within the similar level of linkage position, at figure 3 for example the years calendar (smallest level) linked to the year calendar (displaying the months) not included within the week calendar; mutually distinguishably in different sizes determined according to a distance of a linkage between the first and the second data items, at figure 3 which shows the different sizes between the years calendar and the year calendar, wherein the data items represent time-series data picked up time-sequentially, at figure 3 where the spiral calendar represents sequential time from distant years to present day, "picked up" being interpreted as "selected", and displayed so that the distance of a linkage between the

displayed first and second data items corresponds to an interval from a pick-up time of the first data items to a pick-up time of the second data items, at figure 3 where the interval is selected by a user clicking a mouse. Also, at page 111 at "Spiral Calendar" is taught that the user clicks with the mouse to focus on a detail of the closest calendar or any other calendar in the spiral.

With respect to claim 5, Mackinlay teaches the claimed displaying first data items associated with a first time in which said first data items have been picked up, in a first size; and displaying second data items associated with a second time following the first time and in which the second data items have been picked up, in a second size different from the first size, so that a change of size between the first and second sizes corresponds to a temporal direction between the first time and the second time, at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 6 further requires wherein the distinguishable display is such that a display screen for the second data items is displayed with a smaller size than one for the first data items. Mackinlay teach this at figure 3 with the second data items being the years calendar and the first data items being the year calendar comprising months.

Claim 7 further requires wherein the first data items are displayed at an outermost position in a display screen, and the second data items are displayed inside the first

data items with a display area thereof made smaller. Mackinlay teach this at figure 3 with the spiral having the first data items at the outside of the spiral and the second data items closer to the center of the spiral being inside the first data items.

Claim 8 further requires wherein third data items associated with a time contiguous to the time of the second data items are retrieved, and the third data items are displayed inside the second data items with a display area thereof made smaller. Mackinlay teach this at figure 3 with the third data items being even closer to the center (most distant) part of the spiral.

Claim 9 further requires wherein a display of each date is limited to a given number of data items, and wherein when the number of data items exceeds the given number, the data items are classified in units of a finer date and displayed distinguishably.

Mackinlay teach this at figure 3 where for example, a month is limited to a given number of days, i.e., the days in that month, and when the number of days exceeds the number of days in that month, the display shows months, a finer date, and displayed smaller than the month calendar showing days.

Claim 10 further requires wherein when zoom-in is designated for a screen display, the display positions of the first to third data items are shifted outward and the display areas thereof are made larger. Mackinlay teach this at figure 3 as the spiral.

Claim 11 further requires wherein when the zoom-in is continued for designated period of time, the first data items are moved out of a display screen, and new data associated with a date contiguous to a date of data displayed at an innermost position is retrieved and displayed at the innermost position. Mackinlay teach this at pages 111-112 at the section titled “Spiral Calendar”.

Claim 12 further requires wherein when zoom-out is designated for a screen display, the display positions of the first to third data items are shifted inward and the display areas thereof are made smaller. Mackinlay teach this at pages 111-112 at the section titled “Spiral Calendar”.

Claim 13 further requires wherein when the zoom-out is continued for a designated period of time, data displayed at an innermost position is moved out of a display screen, and new data associated with a date contiguous to a date of data displayed at an outermost position is retrieved and displayed at the outermost position. Mackinlay teach this at pages 111-112 at the section titled “Spiral Calendar”.

Claim 14 further requires wherein when the zoom-in or zoom-out is designated in a screen, a speed of shifting display positions is varied depending on a designated position in the screen. Mackinlay teach this at page 114 at the section “Implementing the Spiral Calendar”.

Art Unit: 2628

Claim 15 further requires wherein graphics such as rings or squares representing dates associated with displays are nested and displayed together with representations of data items. Mackinlay teach this at figure 3 with days nested in a month and months nested in a year, with graphics such as squares representing dates.

Claim 16 further requires wherein the nested display is realized by arranging the graphics such as rings or squares representing dates associates with displays concentrically in units of a given date, and then displaying data items orderly in the graphics. Mackinlay teach this at figure 3 as the spiral calendar.

Claim 17 further requires wherein the graphics such as rings or squares representing dates associated with displays are displayed in different colors associated with the dates. Mackinlay teach this at figure 3 with the top most “appointment” in the lightest color, with the color darkening as the spiral moves deeper.

Claim 20 further requires wherein the accumulated time-series data items include data items accumulated in one-to-one correspondence to dates of creation of data files, data items accumulated in one-to-one correspondence to dates of correction of files, and data items accumulated in one-to-one correspondence to designated dates registered by a user. Mackinlay teach this at page 114 with implementation to read database files, and at section “Implementing the Spiral Calendar” with creation of the calendars and

their subregions and pointers into the underlying database for each subregion, and at page 116 at "Revision" with functions including editing.

With respect to claim 22, Mackinlay teaches the claimed a storage means for storing data picked up in one-to-one correspondence to times; and a displaying means for displaying first data items of a first time in which the first data item has been picked up, in a first size and second data items of a second time following the first time and in which the second data items have been picked up, in a second size different from the first size, so that a change of size between the first and second sizes corresponds to a temporal direction between the first and second times, as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 23 further requires wherein the displaying means displays a display screen for the data items associated with a time contiguous to the desired time with a smaller size than a display screen for the data items of the desired time according to an elapsed time. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 24 further requires wherein the displaying means displays the data items of the desired time at an outermost position in a display screen, and displays the data items of

Art Unit: 2628

a time contiguous to the desired time inside the data items of the desired data with a display area therefore made smaller according to an elapsed time. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 25 further requires wherein the displaying means includes a display limiting means for limiting a display of each time to a given number of data items, and a display dividing means that when the number of data items exceeds the given number, classifies the data items in units of a finer time and displays the data items mutually distinguishably. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 26 further requires wherein said storage means includes a subdividing and accumulating means for subdividing a data accumulation unit into finer units of time in the event that the number of data items should exceed the given number, and then accumulating data items. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 27 further requires a zoom designating means for use in designating zoom-in or zoom-out for a screen display, and a zoom control means that when zoom-in is

designated, shifts the display positions of data items outward so as to increase the display areas thereof, and that when zoom-out is designated, shifts the display positions of data items inward so as to decrease the display areas thereof. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 28 further requires wherein when zoom-in is designated, the zoom control means moves the data items of the desired time out of a display screen, retrieves new data items associated with a time contiguous to a time of data items displayed at an innermost position, and displays the new data items at the innermost position, and wherein when zoom-out is designated, the zoom control means moves the data items displayed at the innermost position out of a display screen, retrieves new data items associated with a time contiguous to a time of data items displayed at an outermost position, and displays the new data items at the outermost position. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 29 further requires wherein the zoom designating means includes a designation input means for use in making a designation in a screen, and the zoom control means varies a speed of shifting display positions depending on a designated position in the screen. Mackinlay teach this as discussed above in the previous rejections and at the

whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 30 further requires wherein the displaying means includes a means for displaying graphics such as rings or squares representing times associated with displays concentrically in units of a given time, and a means for displaying data items orderly in the graphics, and wherein the graphics such as rings or squares representing times associated with displays are nested and displayed together with representations of data items. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 31 further requires wherein the displaying means displays the graphics such as rings or squares representing times associated with displays in different colors associated with the times. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 34 further requires wherein the stored time-series data items include data items stored in one-to-one correspondence to times of creation of data files, data items stored in one-to-one correspondence to times of correction of files, and data items stored in one-to-one correspondence to designated times registered by a user. Mackinlay teach

this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

With respect to claim 110, Mackinlay teaches the claimed computer readable program code means for displaying data items included within a similar level of linkage position simultaneously in a substantially same size; and computer readable program code means for displaying first data items, and second data items linked to the first data items, which are not included within the similar level of linkage position, mutually distinguishably in different sizes determined according to a distance of a linkage between the first and second data, wherein the data items represent time-series data picked up time-sequentially, and displayed so that the distance of a linkage between the displayed first and second data items corresponds to an interval from a pick-up time of the first data items to a pick-up time of the second data items, as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 111 further requires the computer usable medium further having data linked to be used by said computer readable program code means. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

With respect to claim 112, Mackinlay teaches the claimed computer readable program code means for displaying first data items associated with a first time in which the first data items have been picked up, in a first size and second data items associated a second time following the first time and in which the second data items have been picked up, in a second size different from the first size, so that a change of size between the first and second sizes corresponds to a temporal direction between the first and second time, as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 113 further requires including computer readable program code means for zooming in the first and second data items by shifting data in a direction of the second data items to the first data items and making a display area larger, and for zooming out the first and second data items by shifting data in a direction of the first data items to the second data items and making the display area smaller. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 114 further requires the computer usable medium further having time-series data to be used by said computer readable program code means. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

With respect to claim 125, Mackinlay teaches the claimed a first displaying means for displaying data items included within a similar level of linkage position simultaneously in a substantially same size; and a second displaying means for displaying first data items, and second data items linked to said first data items, which are not included within the similar level of linkage position, mutually distinguishably in different sizes determined according to a distance of a linkage between the first and second data items, wherein the data items represent time-series data picked up time-sequentially, and displayed so that the distance of a linkage between the displayed first and second data items corresponds to an interval from a pick-up time of the first data items to a pick-up time of the second data items, as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 126 further requires wherein the data items are displayed with a plurality of stepped sizes according to distances of linkages among a plurality of levels. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 128 further requires wherein the data items represent hierarchical data managed hierarchically and are displayed by regarding a depth in a hierarchy as the distance of a linkage. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 129 further requires wherein new data items on the temporal direction are displayed in relatively large size while old data items on the temporal direction are displayed in relatively small size. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 130 further requires wherein data items on a perimeter of a screen are displayed in relatively large size while data items on a center of the screen are displayed in relatively small size. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 131 further requires wherein said display means displays new data items on the temporal direction in relatively large size while displaying old data items on the temporal direction in relatively small size. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 132 further requires wherein said display means displays data items on a perimeter of a screen in relatively large size while displaying data items on a center of the screen in relatively small size. Mackinlay teach this as discussed above in the

previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 133 further requires wherein a new data item on the temporal direction is displayed in relatively large size while old data items on the temporal direction are displayed in relatively small size. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

Claim 134 further requires wherein data items on a perimeter of a screen are displayed in relatively large size while data items on a center of the screen are displayed in relatively small size. Mackinlay teach this as discussed above in the previous rejections and at the whole article, with special notice to page 111 figure 3, and the section entitled Spiral Calendar.

3. Claims 18, 19, 32 and 33 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claims require the data items to be positioned at random. However, the independent claims require a time-sequential display with the distance of linkage between data items corresponding to a time interval, thereby contradicting claims 18, 19, 32 and 33.

4. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Almis R. Jankus whose telephone number is 571-272-7643. The examiner can normally be reached on M-F, 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AJ



ALMIS R. JANKUS  
PRIMARY EXAMINER